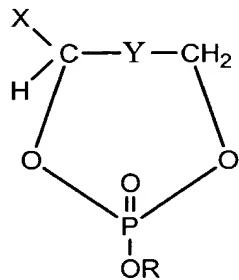


Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for inducing promotion of neural cell differentiation of target cells comprising contacting said target cells for a suitable period of time with an effective amount of a compound of the general Formula I



wherein

Y is -(CH₂)_m-, -CH(OH)- or -C(=O)- and m is [[0-3]] 1-3;

X is H, alkyl, -CH₂OH-, CH₂Oacyl or -CH₂acyl; and

R is H, a cation, alkyl or optionally substituted aryl;

~~provided that when Y is -(CH₂)_m, m=0, and R is H or cation, X is not CH₂Oacyl.~~

2. (original) A method for promoting neural activity in an individual comprising administering to the

individual in need an effective amount of a compound of the general Formula I of Claim 1.

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3. (previously presented) A method according to Claim 2, wherein said neural activity is selected from the group consisting of promotion of neuronal outgrowth, promotion of nerve growth, provision of dopaminotrophic supporting environment in a diseased portion of the brain and nerve rescue.

4. (previously presented) A method for the treatment of disorders and diseases which can be treated by promoting neural cell differentiation and/or neural activity comprising administering to a person in need a therapeutically effective amount of a compound of Formula I of Claim 1.

5. (previously presented) A method according to Claim 4, wherein said disorders and diseases are mental disorders or diseases which are at least one of dementia mental disorders and neuro-degenerative disorders or diseases.

6. (currently amended) A method according to Claim 4, wherein said mental disorder or disease is schizophrenia—or dementia.

7. (original) A method according to Claim 4,
wherein said disorders and diseases are neurodegenerative
disorders or diseases.

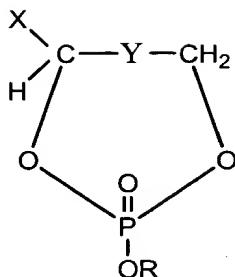
D
O
M
y

8. (currently amended) A method according to claim
1 wherein the compound of formula I is selected from the group
consisting of

- i. 1,3 cyclic glycerophosphate;
- ii. ~~1,2 cyclic glycerophosphate;~~
- iii. phenyl 1,3 cyclic glycerophosphate;
- iv. ~~phenyl 1,2 cyclic glycerophosphate;~~
- viii. 1,3 cyclic propanediol phosphate;
- vi. ~~1,2 cyclic propanediol phosphate;~~
- viiiv. phenyl 1,3 cyclic propanediol phosphate;
- viii. ~~phenyl 1,2 cyclic propanediol phosphate;~~
- ixv. cyclic dihydroxyacetone phosphate; and
- xvi. phenyl cyclic dihydroxyacetone phosphate.

9-16. (canceled)

17. (currently amended) A method for promoting
neural activity in an individual comprising administering to
the individual in need an effective amount of a compound of
the general formula I



D. C. M.
wherein

Y is $-(CH_2)_m-$, $-CH(OH)-$ or $-C(=O)-$ and m is $[[0-3;]]\underline{1-3};$

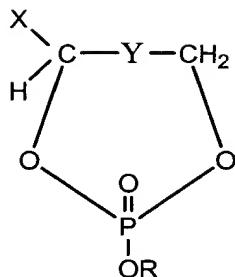
X is H, alkyl, $-CH_2OH-$, CH_2Oacyl or $-CH_2acyl$; and

R is H, a cation, alkyl or optionally substituted aryl;

~~provided that when Y is $(CH_2)_m-$, m=0, and R is H or cation, X is not CH_2Oacyl ,~~

wherein said neuronal activity is selected from the group consisting of promotion of neuronal outgrowth, promotion of nerve growth, provision of dopaminotrophic supporting environment in a diseased portion of the brain and nerve rescue.

18. (currently amended) A method for the treatment of disorders and diseases, other than dementia, which can be treated by promoting neural cell differentiation and/or neural activity, the method comprising administering to a person in need a therapeutically effective amount of a compound of Formula I



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wherein

Y is $-(CH_2)_m-$, $-CH(OH)-$ or $-C(=O)-$, and m is $[[0-3]] \underline{1-3}$;

X is H, alkyl, $-CH_2OH-$, CH_2Oacyl or $-CH_2acyl$; and

R is H, a cation, alkyl or optionally substituted aryl;

~~provided that when Y is $(CH_2)_m-$, m=0, and R is H or cation, X is not CH_2Oacyl .~~

19. (original) A method according to claim 18,
wherein said disorders and diseases are mental disorders or
diseases.

20. (previously presented) A method according to
claim 18, wherein said mental disorder or disease is
schizophrenia.

21. (previously presented) A method according to
Claim 18, wherein said mental disorder is a learning
disability.

22. (original) A method according to claim 18, wherein said disorders and diseases are neurodegenerative disorders or diseases.

23. (previously presented) A method according to Claim 18, wherein said neurodegenerative disorder or disease is Alzheimer's disease or Parkinson's disease.

24. (previously presented) A method according to Claim 18, wherein said disorders or diseases result from exposure of an individual to harmful environmental factors or from a mechanical injury.

25. (previously presented) A method according to Claim 18, for the treatment of nerve rescue after nerve injury.

26. (currently amended) A method according to claim 18 where the general formula I is selected from the group consisting of

- i. 1,3 cyclic glycerophosphate;
- ii. ~~1,2 cyclic glycerophosphate;~~
- iii. phenyl 1,3 cyclic glycerophosphate-P;
- iv. ~~phenyl 1,2 cyclic glycerophosphate;~~
- viii. 1,3 cyclic propanediol phosphate;
- vi. ~~1,2 cyclic propanediol phosphate;~~

- viiiv. phenyl 1,3 cyclic propanediol phosphate;
viii. phenyl 1,2 cyclic propanediol phosphate;
ixv. cyclic dihydroxyacetone phosphate; and
xvi. phenyl cyclic dihydroxyacetone phosphate.

D
MM
27-36. (canceled)

37 (new) : A method according to claim 4, wherein
said mental disorder or disease is dementia.